

SEQUENCE LISTING

<110> Junghans, Claas

Wittig, Burghardt

König Merediz, Sven

Schroff, Matthias

<120> Covalently Closed Nucleic Acid Molecules for Immunostimulation

<130> NHL-NP-37

<140> US 00/000,000

<141> 2002-01-27

<150> PCT/DE00/00565

<151> 2000-02-24

<150> DE19935756

<151> 1999-07-27

<160> 15

<170> PatentIn version 3.1

<210> 1

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

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<222> (1)..(18)

<223> Base sequence

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18

<210> 2

<211> 48

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<222> (1)..(48)

<223> Mini sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

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48

<210> 3

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<212> DNA

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<222> (1)..(60)

<223> AT-2L sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

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accttccttg tactaacgtt gcctcaagga aggttgatct tcataacgtt gcctagatca 60

<210> 4

<211> 116

<212> DNA

<213> Artificial Sequence

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<222> (1)..(116)

<223> ISS30 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 4

cctaggggtt accaccttca ttggaaaacg ttcttcgggg cgttcttagg tggttaacccc 60

taggggttac caccttcatt ggaaaacgtt ctctcggggc ttcttaggtg gtaacc 116

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<222> (1)..(58)

<223> 5'-phosphorylated oligodeoxyribonucleotide

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<210> 6

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<222> (1)..(114)

<223> ISS30-ds sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

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ttctcggggc gttctttact aggtcctctc caggttacca cctaagaacg ccccgaagaa 60

cgttttccaa tgatactagg tcctctccag gttaccacct tcattggaaa acgt 114

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<212> DNA

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<220>

<223> Synthetic Construct

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<222> (1)..(68)

<223> ISS30-sl sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 7

tcttcggggc gttctttttt aagaacgccc cgaagaacgt tttccaatga tttttcattg 60

gaaaacgt 68

<210> 8

<211> 82

<212> DNA

<213> Artificial Sequence

<220>

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<221> misc_feature

<222> (1)..(82)

<223> ISS13 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 8
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 cgttcttcgg gaggtggtaa cc 82

<210> 9

<211> 60

<212> DNA

<213> Artificial Sequence

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<222> (1)..(60)

<223> AT-1L sequence: circular single-stranded with stem loop structure
 (dumbbell), all phosphodiester

<400> 9
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<210> 10

<211> 30

<212> DNA

<213> Artificial Sequence

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<222> (1)..(30)

<223> ISS30-IPS sequence: linear single-stranded sequence, first five a
nd last three phosphoester linkages by thioate

<400> 10
tcattggaaa acgttcttcg gggcgttctt 30

<210> 11

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

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<221> misc_feature

<222> (1)..(30)

<223> ISS30-I sequence: linear single-stranded sequence, all phosphodie
ster

<400> 11
tcattggaaa acgttcttcg gggcgttctt 30

<210> 12

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (1)..(30)

<223> AT-PS sequence: linear single-stranded sequence, first five and last three phosphoester linkages by thioate

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30

<210> 13

<211> 116

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (1)..(116)

<223> NoSS30 sequence: circular single-stranded with stem loop structure (dumbbell), all phosphodiester

<400> 13

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60

taggggttac caccttcatt ggaaaacctt cttaggggtg ttcttaggtg gtaacc

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<221> misc_feature

<222> (1)..(35)

<223> Deoxyribonucleotide WOT-11-P

<400> 14

gaagaacggtt ttocaatgat ttttcattgg aaaac

35

<210> 15

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Construct

<220>

<221> misc_feature

<222> (1)..(33)

<223> Deoxyribonucleotide WOT-10-P

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gttcttcggg gcgttctttt ttaagaacgc ccc

33

204270 TFE/500F